

Ross Valley Groundwater Basin

- Groundwater Basin Number: 2-28
- County: Marin
- Surface Area: 1,765 acres (2.8 square miles)

Basin Boundaries and Hydrology

The Ross Valley groundwater basin is a small, coastal basin located about 10 miles north of San Francisco, with portions of the basin lying in the City of Corte Madera and Larkspur. It is bounded to the east by San Francisco Bay and to the north by Corte Madera Creek. From its northern and eastern boundaries, respectively, the basin extends south a maximum distance of 2 miles and inland (west) a distance that varies from about 1 mile in the south to just over 2 miles in the north. The basin boundaries approximate the contact between the artificial fill (predominantly) and alluvium (minor) in the basin and the surrounding bedrock. The artificial fill is characterized as fill overlying San Francisco Bay Mud; and the alluvium as Holocene, undifferentiated deposits (Knudsen, 2000). Additional deposits mapped within the basin include Holocene San Francisco Bay muds, which occur along and the shoreline and inland. The annual precipitation in the basin ranges from 31 inches in the east to 41 inches in the west (USDA, 1999).

Hydrogeologic Information

Water Bearing Formations

Unconsolidated Quaternary alluvium comprises the water-bearing sediments in the basin (DWR, 1975). Published information describing the physical characteristics and thickness of these sediments were not found.

Restrictive Structures (optional)

None known (DWR, 1975).

Groundwater Level Trends

No published information was found that would indicate groundwater level trends for the Ross Valley groundwater basin.

Groundwater Storage Capacity

No published information was found addressing the groundwater storage capacity of the Ross Valley groundwater basin.

Groundwater in Storage

No published report was found addressing the quantity of groundwater in storage.

Groundwater Budget (Type)

Not enough data exists presently to provide either an estimate of the Ross Valley basin's groundwater budget or the groundwater extraction from the basin

Groundwater Quality

Characterization No published information was found characterizing the groundwater in the Ross Valley groundwater basin.

Impairments Limited 1954 data suggested no sea-water intrusion, while reports in 1972 suggested possible intrusion in the lower portions of the basin (DWR, 1975).

Well Production Characteristics

No published information was found that would indicate well production characteristics in the Ross Valley groundwater basin.

Well Characteristics

Well yields (gal/min)		
Municipal/Irrigation	No data	
Total depths (ft)		
Domestic	Range: 158-300	Average: 229 (Based on information from (2) drillers logs submitted to DWR).
Municipal/Irrigation	Range: No data	Average: No data

Active Monitoring Data

No information was found that would indicate active monitoring is being conducted within the basin

Agency	Parameter	Number of wells /measurement frequency
Department of Health Services and cooperators	Groundwater levels	
	Miscellaneous water quality	
	Title 22 water quality	

Basin Management

Groundwater management:	Unknown
Water agencies	
Public	Marin Municipal Water District
Private	

References Cited

- USDA. United States Average Annual Precipitation, 1961-1990: Map Layer, 1999.
- USGS, Open-File Report 00-444, Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County, San Francisco Bay Region, California: A Digital Database, 2000, Knudsen, etal.
- California Department of Water Resources, Sea-Water Intrusion in California, Inventory of Coastal Ground Water Basins. Bulletin 63-5 October 1975.

Additional References

- Ellis, William C. and Associates, 1978, Groundwater Resources of Ross Valley: A Report on Water Planning Investigations Prepared for Marin Municipal Water District, Marin County, California.

Errata

Changes made to the basin description will be noted here.